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THE RESCUE MISSION OF THE WILD BOARS SOCCER TEAM, THAILAND:

A Case Study on Leadership in Emergencies

Abstract

During the summer of 2018, the world was captivated by news about the Wild Boars soccer team, trapped in a cave in Thailand. This paper analyzes instances of leadership in the internationally-coordinated rescue effort. We share a lesson plan to support critical thinking in the roles of different leadership approaches and theories to apply this knowledge in a similar context. We present our methodology for developing this lesson plan and identification of leadership within the case; highlighted approaches include followership, servant leadership, situational leadership, and team-based leadership. We also pose three ethical issues that emerged within rescue operations. Educators can incorporate analysis of emergency response cases in their teaching to public sector officials to learn about various leadership styles that describe their approach. Our paper includes a risk management development plan exercise, incorporating a real-life emergency response incident.

Introduction

On Saturday, June 23, 2018, twelve members of the Thai Wild Boars soccer team and their coach disappeared (ABC News In-depth, 2018; CNA, 2018). Heavy monsoon rains fell as family members of the boys raised the alarm within their community. They had ventured into the Tham Luang cave complex in Khun Nam Nang Non-Forest Park in Chiang Rai, Thailand. Family and first responders convened to look for the team yet were only able to enter so far due to flooding conditions. Over the next 18 days, the world watched as 10,000 volunteers, emergency responders, experts, and journalists came to witness and participate in the successful diving rescue of all thirteen members of the soccer team. The primary commander of the rescue operation was Chiang Rai Governor Narongsak Osotanakorn. Many challenges arose during the rescue operation:

- Lack of diving expertise, workforce, and appropriate equipment at the site;

- Recurring heavy rains contributing to rising water levels and low oxygen supply within the cave;

- Low visibility in cave waters due to stirred sediment from emergency responders' movement;

- Narrow tunnels and complex geological formations, such as different passageways, holes, and porous rock;

- Inadequate food and fresh air within the cave; and

- Lack of swimming and diving experience among the soccer team members (ABC News In-depth, 2018; Asia Society, 2018; CNA, 2018).

Unbeknownst to the mass of humanity outside, Coach Ekapol "Ek" Chanthawong kept the boys calm and alive, despite being cut off from communication and resources from the outside world for ten days (Asia Society, 2018). The rescue of the Wild Boars occurred through an international effort of volunteers, military, government officials, and experts (ABC News In-depth, 2018; Asia Society, 2018; CNA, 2018). In order to maximize the potential benefit from this success story, it is important to analyze the case and explore the leadership insights that may have application for others who are operating in extreme environments (Russell, 2019; Waugh & Streib, 2006; Yammarino et al., 2015).

Lesson Plan Introduction

As part of a course on Leadership for Diverse Contexts, the authors of this paper were tasked to create a learning activity to support critical thinking amongst students in the course. The Thai Wild Boars incident captured our interest: What were underlying leadership approaches followed by crucial leaders during the incident contributed to saving the team? The primary objectives of our study were to:

1. Identify key stakeholders, leadership roles, and approaches embodied within the case; and

2. Form a lesson plan to support learning for developing a response to an emergency.

Educational objectives of the provided lesson plan are to:

a) Identify critical roles of different leaders and leadership approaches; and

b) Apply the knowledge gained from this study in a similar emergency context.

Methodology

In the conceptualization of our lesson plan, we incorporated the review of prominent leadership theories; the specification of relationships amongst variables of the emergency response approach, including ethical issues; and analysis of the case through inferences about the leadership manifested by the stakeholders in the case. We selected this event purposively, as it is recent and aligned with the authors' interests in disaster response. We identified leadership instances of the case by researching available secondary online sources: news articles, videos, documentaries, and interviews with stakeholders. Three key texts guided analysis of leadership: Northouse's (2019) Leadership: Theory and Practice; Jackson and Perry's (2018) A Very Short, Fairly Interesting, and Reasonably Cheap Book About Studying Leadership; and Rath and Conchie's (2008) Strengths-Based Leadership: Great Leaders, Teams, and Why People Follow. Figure 1 illustrates our working procedure to accomplish the case study, including concepts from our literature review.
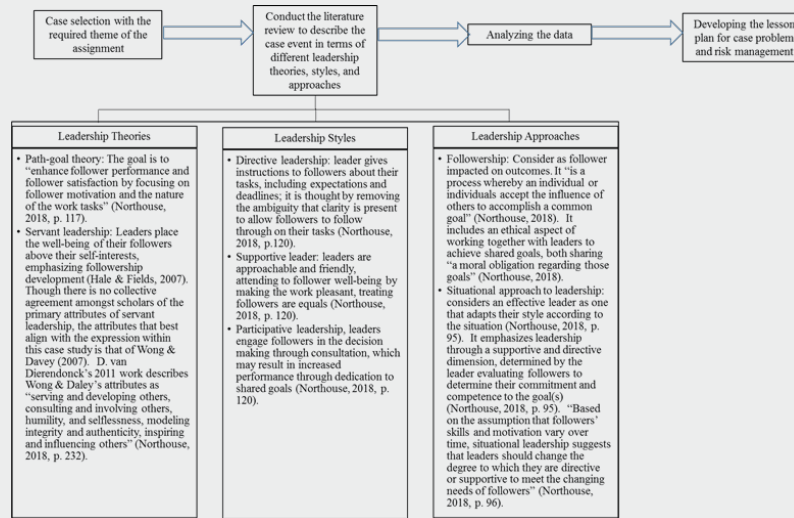
Figure 1.   Schematic diagram of the case study with theoretical explanation

Findings and Discussion

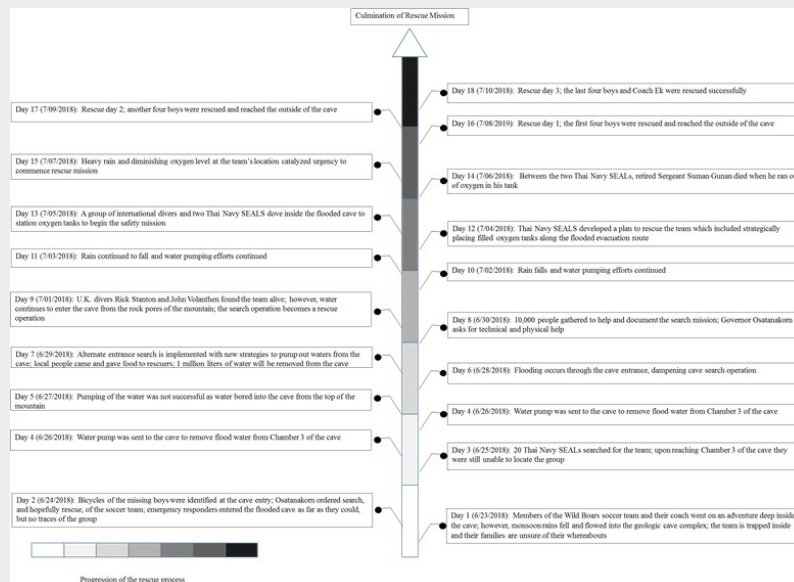The 18-day rescue operation is represented in a timeline in Figure 2.

Figure 2. Timeline of the case in a nutshell. Content of timeline sourced from CNN (2018).

Key Stakeholders. Exploration of the case was enriched by considering stakeholder sub-groups based on power and interest (Figure 3), as well as mapping stakeholders' relative levels of concern (Figure 4). A pathway model (Figure 5) clarified the inter-relational status, activities, and coordination among stakeholders, activities, and outcomes to accomplish the long-term goal to rescue the team. Incorporating the stakeholders in the pathway model illustrates the complex interrelationship among outputs and short-term, mid-term, and long-term outcomes of the activities and outputs (Trochim et al., 2012).
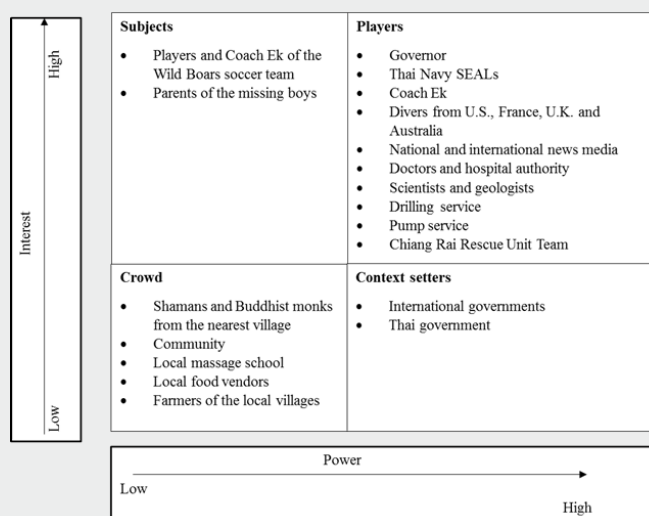

Figure 3. Stakeholder sub-groups based on power and interest. Subjects have low power but high interest; Players have high power and high interest; Crowd have low power and low interest; Context setters have high power but low interest. Adapted from Bryson, Patton, and Bowman (2011), as well as Eden and Ackermann (1998).
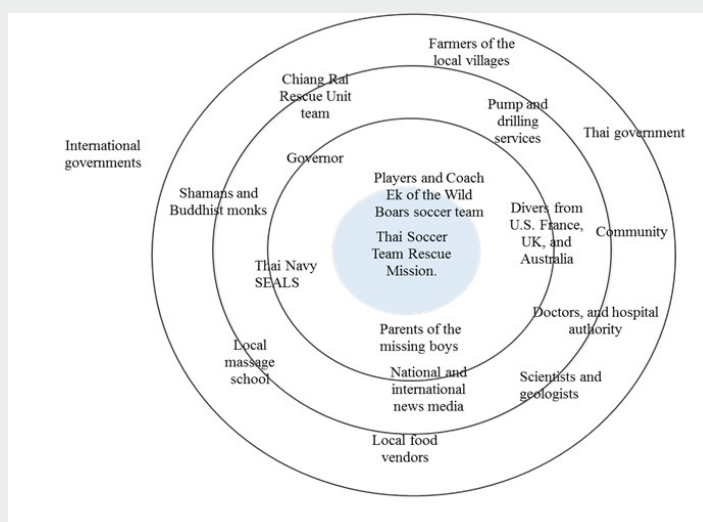

Figure 4. Positions of different stakeholders of the Thai soccer team rescue mission. Stakeholders closer to the center have a higher stake in the success of the mission. Model adapted from Trochim and colleagues (2012).
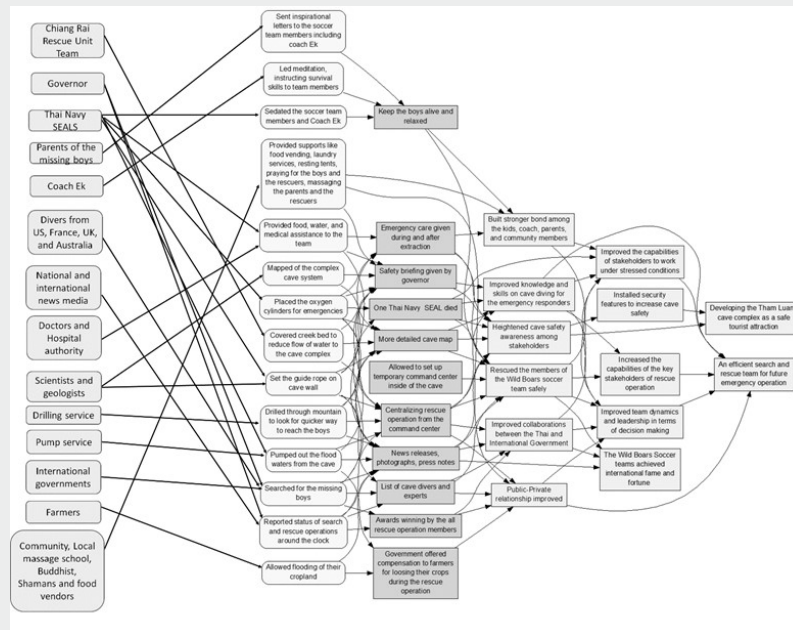
Figure5. Modified pathway model or coordination patterns of multiple stakeholders of the Thai soccer team rescue mission. Model partially generated from software available through the Cornell Office for Research on Evaluation (2015).

Lesson Plan

Participants in the class were already familiar with leadership theories. We presented the lesson plan with educational objectives (Table 1) to enhance learning.

Major leadership events of key players. Thousands of stakeholders contributed to the success of the mission, some with dynamic leadership styles; and we encourage further dissection and exploration of various perspectives of the players beyond the scope of our lesson plan. In the scope of our case study, we primarily focused our leadership identification to key players in the rescue event (see Figure 3). Governor Osatanakorn relied upon his command center to retrieve and disseminate information to the international team of emergency responders (CNA, 2018). The command center hierarchy consisted of various teams responsible for tasks, such as managing the tent city by the cave, searching for alternate cave entrances, coordinating

with internal cave base "Chamber 3," and operating pumps removing water from the cave (CNA, 2018). Stranded inside the dark cave with the soccer team players, Coach Ek motivated the boys, gave them his food, and led them in meditation, keeping them in a calm state, which reduced their oxygen usage in the closed-off space.

Table 1
Educational Objectives of Lesson Plan

Educational Objectives	Activities	Resources / Materials
Objective 1: Identify the critical roles of leaders and leadership approaches/theories.	Explore timeline and events of the case, review various leadership theories and approaches, and identify connections	YouTube documentary by Bisbo (2018). Video Reflection Worksheet. Case Problem Worksheet.
Objective 2: Apply knowledge gained from the case in another similar context.	Develop a risk management plan in response to a similar hypothetical crisis.	Risk Management Plan questions.

We present various manifestations of leadership, beyond the roles played by Governor Osatanakorn and Coach Ek:

- Followership: This approach manifests when followers influence the outcomes (Jackson & Parry, 2018). With the common goal of getting the children out of the cave alive, followership occurred between the soccer team members and Coach Ek, as well as between Governor Osatanakorn and the command center that branched out to the larger search and rescue mission. With the common moral goal of getting out alive, the boys worked with Coach Ek, following his survival skill instructions and meditation to keep calm and conserve their physical energy (Asia Society, 2018). Divers, medical staff, and scientists provided vital mission information to the governor at the command center (CNA, 2018). An international group of a caver and divers proposed the likely location of the team within the cave (CNA, 2018). Scientists provided geologic information about the cave, allowing them to efficiently remove sufficient water (CNA, 2018). In addition to locating the team, divers carried out other essential tasks, such as laying rope guides in the murky waters, strategically placing oxygen tanks, and removing the team from the flooded cave (CNA, 2018). Medical staff joined divers, stayed with the team through extraction, and worked to safely transport the boys to a hospital quarantine unit to bring them back to sustained health (CNA, 2018).

- Participative leadership: Before sedating the team to guide them out of the flooded cave, medical staff and other emergency response personnel informed the team of the recommended course of action, receiving their permission before dosing them (CNA, 2018).

- Servant leadership: Humility, altruism, vision, trust, empowerment, and service are the common virtues for servant leaders (Russell, 2019). Coach Ek exemplified servant leadership in putting the needs of the soccer team above his interests while they were alone in the cave for over a week; he sacrificed his own nourishment by giving them his food (CNA, 2018).

- Supportive behavior dimension of leadership: Coach Ek was friendly and inspired the boys by trying to make the work of staying alive pleasant through the practice of meditation (Asia Society, 2018; CNA, 2018).

- Situational leadership: Modern emergency management requires spontaneous yet meticulous organization and planning. Moreover, emergency managers must be spontaneous yet meticulous organization and planning. Moreover, emergency managers must be innovative and flexible to adapt to any emergent situation (Waugh & Streib, 2006). Several stakeholders presented these characteristics in situational leadership. Coach Ek adapted his leadership style with the soccer team players depending on the situation; he transitioned between being directive in giving clear instructions about what water to drink safely and leading meditation. When the divers initially found the team within the cave, they verified everyone was present and motivated them to wait longer for the actual rescue by telling them they were "very strong," with food and a doctor returning the next day (CNA, 2018). The Chiang Rai Rescue Unit Team fluctuated between taking instruction from the command center and leading groups. The unit was directed by Ossatanakorn's command center to identify holes on top of the complex, with direction to cover them to keep water from the elevated creek bed pouring into the cave (CNA, 2018). In this effort, the unit led volunteers and soldiers to utilize available materials to complete the task (CNA, 2018).

- Team leadership: Governor Osotanakorn knew when to intervene, deferring to various teams and individuals of expertise to lead specific tasks, as well as trust leads of various teams to manage their portion of the rescue. Accordingly, team leadership may be related to team cohesion.

Yammarino and colleagues (2015) describe team cohesion as "the attraction among individual members of the team, and to the team, as well as the integration of the team as it pursues goals; team cohesion is the tendency for members of a team to be in unity while working toward a goal and/or to satisfy emotional needs of team members" (pp. 217-219).

The following critical ethical issues arose during the rescue operation that supports the domains of ethical theories described in Northouse's (2018) chapter on Leadership Ethics:

- Governor Osotanakorn pondered, telling the media immediately once the team was found; he opted to tell the parents first instead (CNA, 2018).

- Involvement of inexperienced divers in the rescue: one Thai Navy SEAL perished while diving (CNA, 2018). •

- The command center determined the safest extraction method team was to sedate the team, cover their faces with full-face oxygen-pumping masks, and guide them out of the flooded cave with diving teams (CNA, 2018; Lawthaweesawat et al., 2019). This decision was made to avert a potential underwater panic of the team, as the soccer team did not know how to swim or dive (CNA, 2018). The command center kept secret to outsiders the decision to sedate until successful extraction; however, the team's permission was obtained a day before extraction began (CNA, 2018). It is not clear if the boys' family members were aware they would be sedated through the extraction process.

In the following sections, we provide guidance on teaching procedures to support the educational objectives of the lesson plan.

Objective 1 Teaching Procedures. Begin by discussing various leadership theories, approaches, and styles; we have provided the terms that informed our analysis in Figure 1. Additional leadership content may be found referring to the texts mentioned in our methodology. We selected a 17-minute animated video documentary from YouTube (https://youtu.be/i0JHjSedfDk) to show to students informing main events of the case, which the instructor may want to show to students as a group. Before showing the video, provide the video reflection sheet (Figure 6a) to students to prime critical thinking on the case. After showing the video, ask students to complete the case problem worksheet (Figure 6b) and risk management plan sheet (Figure 6c).

Figure 6. Video reflection sheet (left), Case Problem Worksheet (middle), and Risk management Plan Worksheet (Right).

Case Problem Exercise. The instructor can use the worksheet to guide discussion or as a class exercise that may be graded as part of an assessment of the students' participation and understanding of leadership. Instructors may present the case problem to students as follows: "You are being appointed the new head of Disaster Management for Khun Nam Nang Non-Forest Park, Thailand. As your first task, you are asked to review the Wild Boars soccer team search and rescue mission and prepare a crisis management report. In order to use your findings to ensure this situation does not happen again, you are asked to answer specific questions."

Case Problem Worksheet questions:

1. What leadership approaches are at play in the case of Coach Ek and the Commander? In what situations did directive, supportive, or participative behaviors occur; and what effect did they have on followers?

2. Who are the key stakeholders in an emergency preparedness plan for Khun Nam Nang Non-Forest Park?

3. By looking at the leadership approaches and theories discussed in the case, how could the Forest Park enact measures to be more effective in future rescue situations?

4. Based on the background and overview of the case study, how could the Khun Nam Nang Non-Forest Park prevent this situation from occurring again? What types of communication plans or resources could be provided?

5. Would you recommend different leadership approaches, other than what was expressed in this case study, in order to make a rescue more effective in a similar scenario?

Objective 2 Teaching Procedures

The risk management plan activity can be presented as a class exercise or as a more significant group project. Teachers may say to students: "During this activity, you and your group will be asked to create a general risk management plan that can be implemented across a variety of areas. There is no singular way to go about creating this plan, and the group is encouraged to think outside the box while also creating safe procedures. On the handout, you can find some questions to keep in mind as you complete the activity." Below each question presented are some points that can be used to guide the development of the plan.

1. How do groups identify the leader in challenging situations? Is a leader necessary?

• Students should challenge themselves to think critically about what type of leadership is needed to handle the potential situation.

• Are they identifying a group? Is it an individual? A community response team?

2. How can groups properly prepare for dangerous situations without knowing what might be ahead of them?

• This is an opportunity for students to get creative with their thinking.

• What are some ways a risk management plan can be proactive rather than reactive?

3. Is there a proper way for leaders to delegate tasks, to communicate with their followers?

• Students should be able to engage with course concepts here.

• What have they learned about different leadership styles, and what is their leadership philosophy? This question is essential for students to identify a leadership style they think is best for a risk management plan and talk about how their philosophy is seen within their plan.

4. What can followers do in these situations that may be beneficial to leaders?

• In the Thai cave rescue, the community was doing everything they can to assist the boys and their families.

• Students should think critically: Is this something that can occur across multiple situations, or was this just happenstance?

The student groups should share their risk management plans with the larger group to encourage additional discussion on leadership in crises.

Conclusion, Limitations, and Recommendations

Explorations of leadership in current and recent events encourage students to think more critically about leadership, including the instances and forms of support, as well as heightened awareness of how leadership and followership present in emergency response situations. We argue that context should be

utilized in the teaching of leadership to emergency response professionals. Crosby and Bryson (2018) emphasized that leadership scholars should explore diverse methods beyond the traditional research case study. Thus, our study, through secondary resource analysis of online resources, is a different approach to exploring public leadership in real-life situations.

Wood (2014) identified the following stages for leaders working in emergency situations: (1) build a high-impact team (2) inform team members about their roles, (3) cultivate trust and transparency, (4) understand the role of risk, and (5) develop a unique culture. In our analysis we found a similar approach utilized by Governor Osotanakorn in the work of welcoming participants around the world to support and document the rescue, organizing and assigning responsibility through the use of a command center, being transparent with others about the status and plans of the rescue operation (with the exception of the sedation operation), and the coordinated management of the tent city and interpersonal relations with the family members.

The various leadership examples described in the lesson plan are based on the unique context of the emergency situation of the Wild Boards Soccer Team rescue. If another emergency situation arisen in a different location in the world, or even if another emergency situation occurred in the same Thailand cave complex, it would be inappropriate to assume the same leadership styles and approaches would manifest in the same ways. Such differences in context may be explained through place-based leadership. Jackson (2019) emphasized the inclusion of place in research, teaching, and practice of public leadership. Because the place is a crucial strategic resource for leadership that builds collective identity, purpose, and strategy, it can also simultaneously address the practices of collective leadership and the domains of collaborative governance that can endorse public value co-creation. Beer and colleagues (2019) further discuss place-based leadership:

"Several summaries of place-based leadership have been produced (Beer & Clower, 2014), and there have been recent significant theoretical contributions (Sotarauta, Beer, & Gibney, 2017) arguing place leadership is transformative rather than transactional (Collinge et al., 2010a), and the product of collaboration rather than the efforts of an individual (Hambleton, 2015). Place leadership is fundamentally shaped by context (Gibney, 2014), and thus highly differentiated in its expression (Nicholds et al., 2017). The circumstances affecting a region, city, town or small rural community determine the capacity for leadership to emerge, and shape the ways in which it is expressed (Beer, 2014)." (pp. 171-172)

Leadership educators should incorporate current real-life examples in their teaching to students. In their exploration of a Mars mission, Yammarino and colleagues (2015) found a critical need for leadership models with unique team dynamics, such as long missions with periods of no or intermittent communication and support, isolation and confinement, and the risk of great physical and psychological harm. Many of these same dangerous conditions occur in other contexts for first responders, crisis management teams, Special Forces operations, and scientific exploration teams who are operating in extreme environments (Yammarino et al., 2015).

Exploration through stakeholder analysis and consideration of past ethical incidents in the case may inform future crisis management plans. We encourage the use of context and cases in lesson plans to support education in identifying, defining, and exploring opportunities for leadership in real-life situations. Students, emergency management officials, and researchers can refer to this lesson plan and analysis as an example for uses like education, training, and research. Organizations develop training programs for emergency responders based on leadership principles to cope with emergency situations. For example, Ropella (2019) organized a four-day-long training program on transformational leadership for emergency responders. Also, the Leary Firefighters Foundation (2015) launched a first responders leadership program that focuses principles for leading in high-risk and high-stress

environments, how to build team cohesion, and how to resolve conflicts and problems within the team.

A significant limitation in the creation of our lesson plan was none of the data analysis came from primary sources, such as interviews with the search and rescue officials or the soccer team. This presents a loss to identify additional instances of leadership and followership to provide additional complexity and nuance to our analysis and lesson plan. We recommend additional scholarly work in the exploration of this case. In there is a need to learn more about the leadership styles and approaches used, as well as intricacies in the relations of the emergency response teams, including balances of power and communication plans that were part of the rescue of the Wild Boars soccer team.

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